

# 深圳市千目通讯科技有限公司

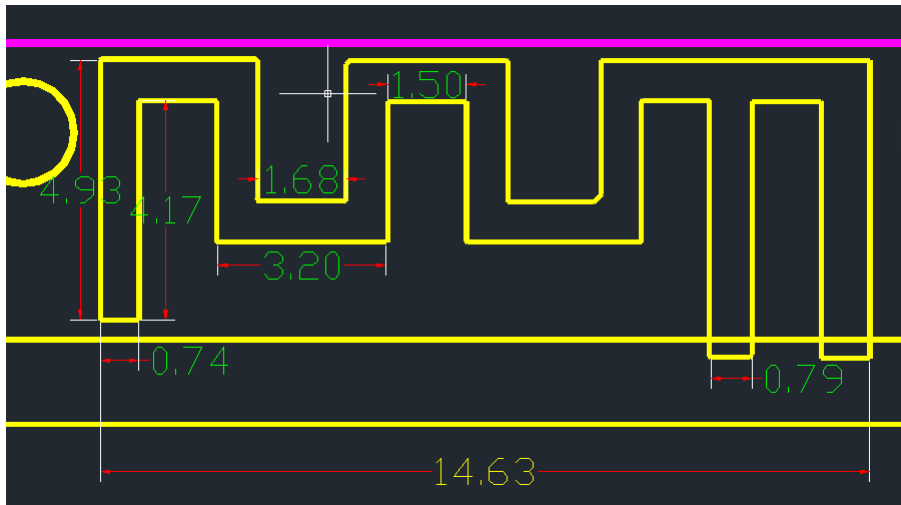
Shenzhen Qianmu Communication Technology Co., Ltd.

## Antenna specification

|                                  |                        |                      |                                      |
|----------------------------------|------------------------|----------------------|--------------------------------------|
| <b>Applicable model</b>          |                        |                      |                                      |
| <b>Customer</b>                  |                        |                      |                                      |
| Specification description        |                        |                      |                                      |
|                                  | <b>Product content</b> | <b>Specification</b> | <b>Customer material code</b>        |
| <b>Specification description</b> | 2.4 G antenna          | Onboard              |                                      |
|                                  |                        |                      |                                      |
|                                  |                        |                      |                                      |
| Change resume                    |                        |                      |                                      |
| <b>Serial number</b>             | <b>Date</b>            | <b>Version</b>       | <b>Brief introduction of changes</b> |
| 1                                | 2022-01-13             | V1.0                 | New project                          |
| 2                                |                        |                      |                                      |
| 3                                |                        |                      |                                      |

|                                                    |                  |                |                                                                           |                |              |
|----------------------------------------------------|------------------|----------------|---------------------------------------------------------------------------|----------------|--------------|
| Supplier sample confirmation                       |                  |                |                                                                           |                |              |
| <b>R&amp;D</b>                                     | <b>Structure</b> | <b>Audit</b>   | <b>Judge</b>                                                              |                |              |
|                                                    |                  |                | PASS <input checked="" type="checkbox"/><br>FAIL <input type="checkbox"/> |                |              |
| Customer sample confirmation                       |                  |                |                                                                           |                |              |
| <b>Electron</b>                                    | <b>Structure</b> | <b>Project</b> | <b>Procurement</b>                                                        | <b>Quality</b> | <b>Audit</b> |
|                                                    |                  |                |                                                                           |                |              |
| <b>Reasons for rejection or other precautions:</b> |                  |                |                                                                           |                |              |

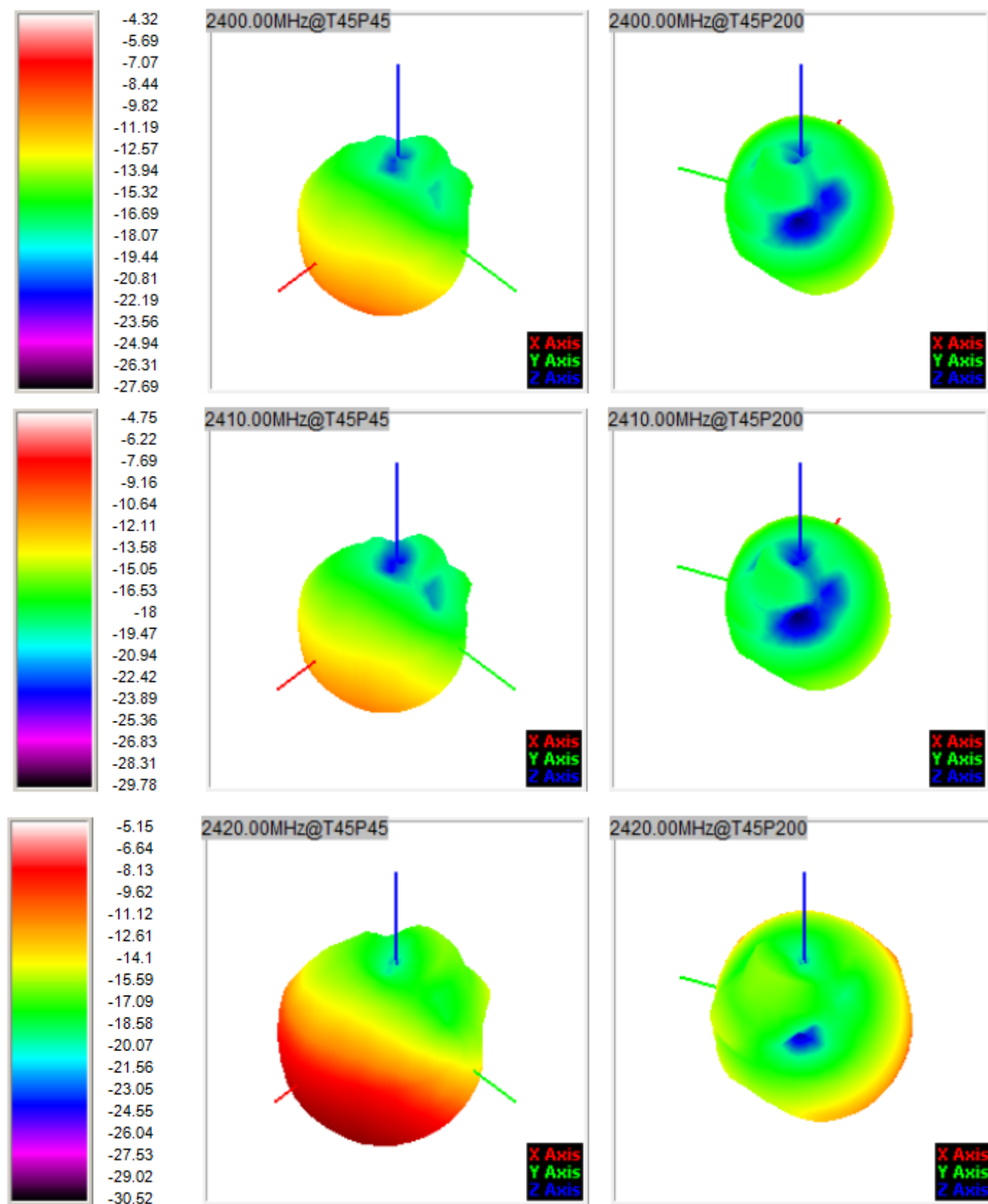
## 1、 Antenna Photo & Length (mm)

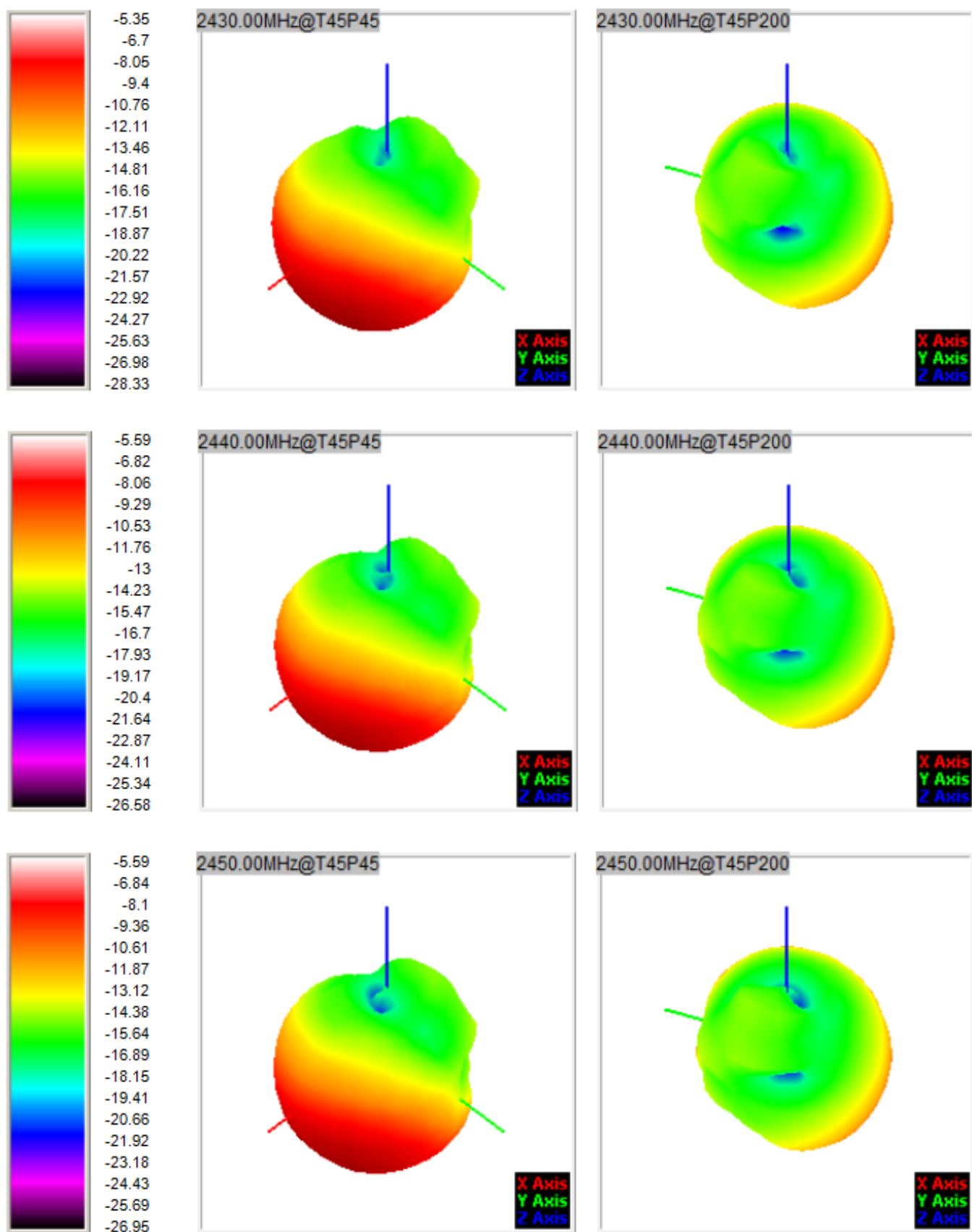


## 2、 Antenna gain and efficiency

| Frequency ID               | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     |
|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Frequency (MHz)            | 2400.0 | 2410.0 | 2420.0 | 2430.0 | 2440.0 | 2450.0 | 2460.0 | 2470.0 | 2480.0 | 2490.0 | 2500.0 |
| Point Values               |        |        |        |        |        |        |        |        |        |        |        |
| Ant. Port Input Pwr. (dBm) | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   |
| Tot. Rad. Pwr. (dBm)       | -10.36 | -10.71 | -10.95 | -11.05 | -11.29 | -11.34 | -11.57 | -12.00 | -12.13 | -12.18 | -12.43 |
| Peak EIRP (dBm)            | -4.32  | -4.75  | -5.15  | -5.35  | -5.59  | -5.59  | -5.76  | -6.11  | -6.23  | -6.36  | -6.68  |
| Directivity (dBi)          | 6.04   | 5.96   | 5.80   | 5.70   | 5.70   | 5.75   | 5.81   | 5.89   | 5.90   | 5.83   | 5.75   |
| Efficiency (dB)            | -10.36 | -10.71 | -10.95 | -11.05 | -11.29 | -11.34 | -11.57 | -12.00 | -12.13 | -12.18 | -12.43 |
| Efficiency (%)             | 9.20   | 8.50   | 8.00   | 7.90   | 7.40   | 7.30   | 7.00   | 6.30   | 6.10   | 6.10   | 5.70   |
| Gain (dBi)                 | -4.32  | -4.75  | -5.15  | -5.35  | -5.59  | -5.59  | -5.76  | -6.11  | -6.23  | -6.36  | -6.68  |
| NHPRP $\pm \pi/4$ (dBm)    | -11.34 | -11.70 | -11.95 | -12.06 | -12.30 | -12.33 | -12.56 | -12.99 | -13.12 | -13.19 | -13.44 |
| NHPRP $\pm \pi/6$ (dBm)    | -12.63 | -13.00 | -13.26 | -13.37 | -13.62 | -13.65 | -13.89 | -14.34 | -14.49 | -14.59 | -14.87 |
| NHPRP $\pm \pi/8$ (dBm)    | -13.62 | -14.00 | -14.26 | -14.39 | -14.65 | -14.70 | -14.95 | -15.41 | -15.59 | -15.71 | -16.01 |
| Upper Hem. PRP (dBm)       | -16.13 | -16.53 | -16.81 | -16.96 | -17.23 | -17.24 | -17.47 | -17.92 | -18.05 | -18.06 | -18.22 |
| Lower Hem. PRP (dBm)       | -11.70 | -12.03 | -12.25 | -12.34 | -12.57 | -12.63 | -12.86 | -13.28 | -13.41 | -13.48 | -13.76 |
| Upper Hem. PRP (%)         | 2.44   | 2.22   | 2.09   | 2.01   | 1.89   | 1.89   | 1.79   | 1.61   | 1.57   | 1.56   | 1.51   |
| Lower Hem. PRP (%)         | 6.77   | 6.27   | 5.96   | 5.84   | 5.53   | 5.46   | 5.17   | 4.69   | 4.56   | 4.49   | 4.21   |

### 3、Apple map

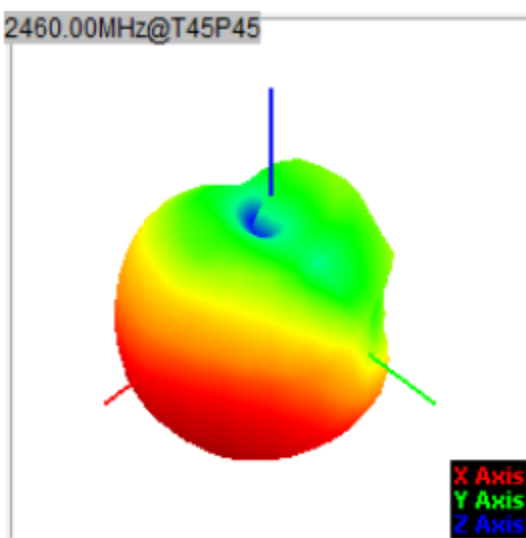




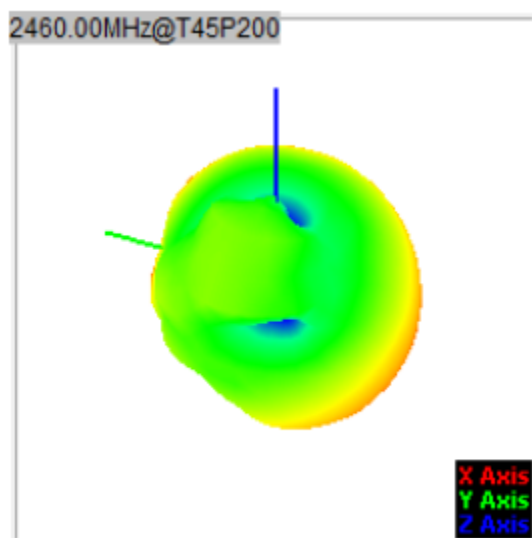


-5.76  
-7.07  
-8.37  
-9.68  
-10.99  
-12.29  
-13.6  
-14.91  
-16.21  
-17.52  
-18.83  
-20.13  
-21.44  
-22.75  
-24.05  
-25.36  
-26.67  
-27.97

2460.00MHz@T45P45

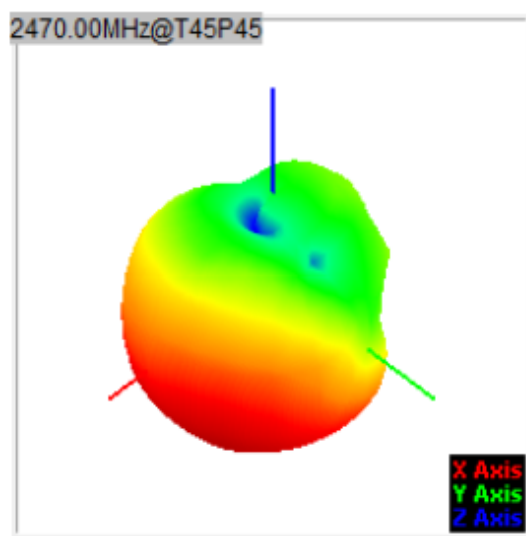


2460.00MHz@T45P200

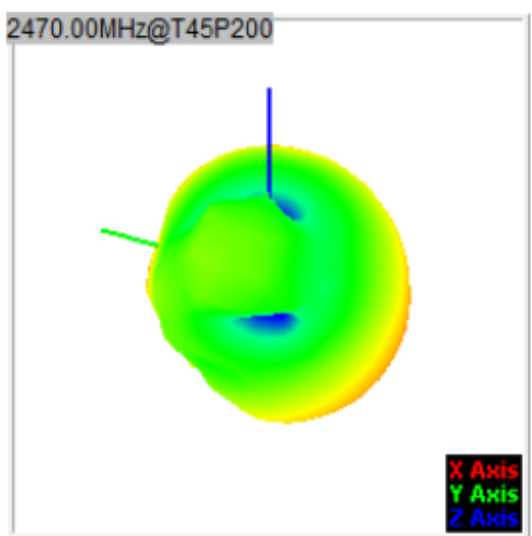


-6.11  
-7.46  
-8.82  
-10.17  
-11.52  
-12.88  
-14.23  
-15.58  
-16.94  
-18.29  
-19.64  
-21  
-22.35  
-23.7  
-25.06  
-26.41  
-27.76  
-29.12

2470.00MHz@T45P45

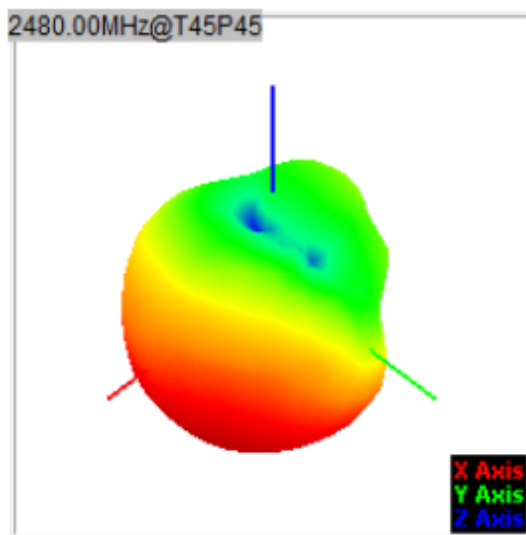


2470.00MHz@T45P200

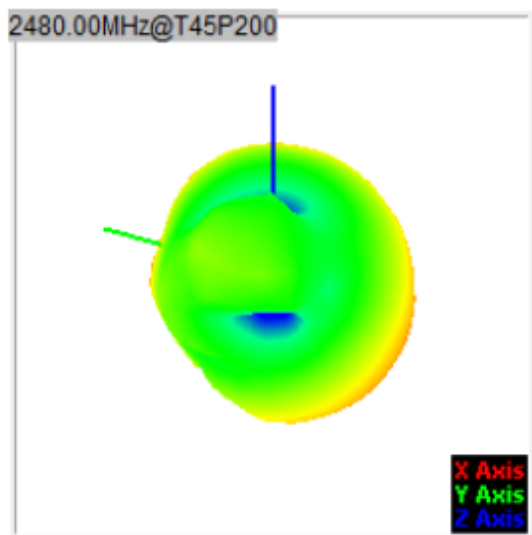


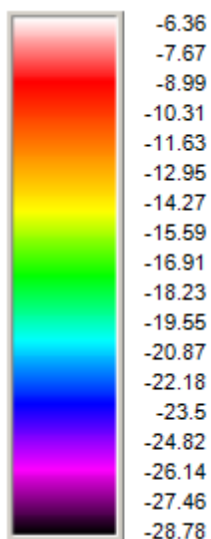
-6.23  
-7.57  
-8.91  
-10.24  
-11.58  
-12.92  
-14.26  
-15.6  
-16.94  
-18.28  
-19.62  
-20.96  
-22.3  
-23.64  
-24.98  
-26.32  
-27.66  
-29

2480.00MHz@T45P45

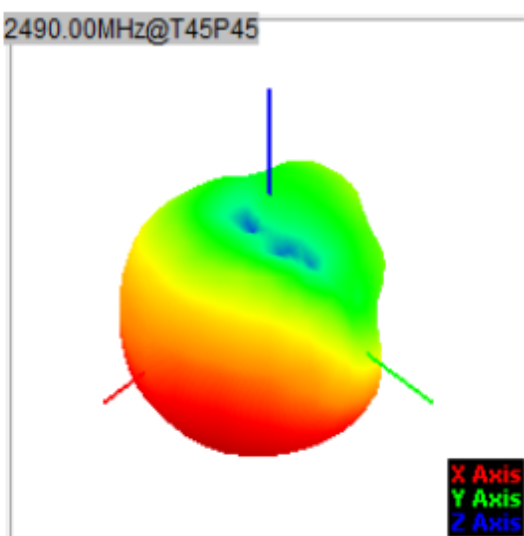


2480.00MHz@T45P200

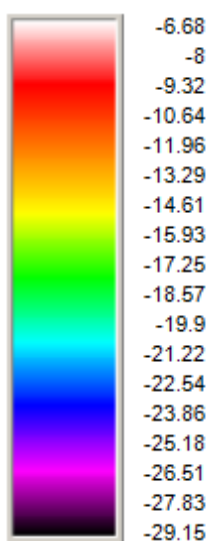
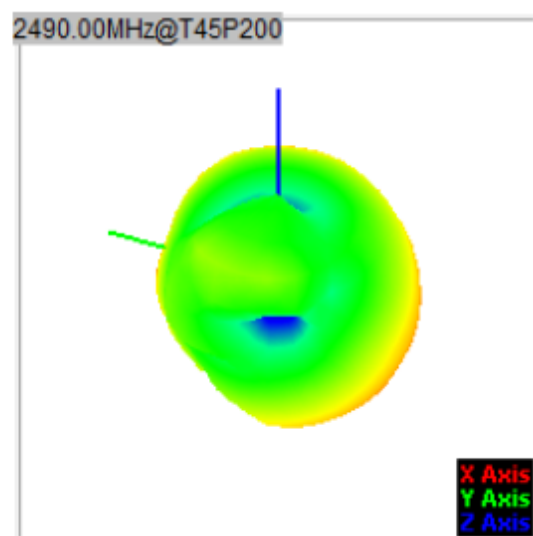




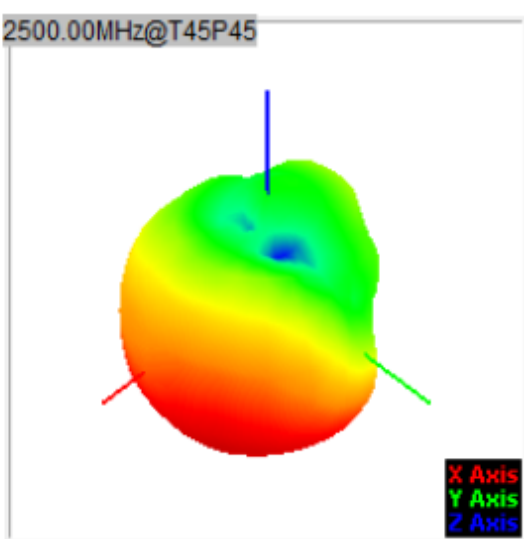
2490.00MHz@T45P45



2490.00MHz@T45P200



2500.00MHz@T45P45



2500.00MHz@T45P200

